

8b
NK
4605
.L4
1883

CHINA PAINTING



FLORENCE LEWIS



Digitized by the Internet Archive
in 2016 with funding from
Getty Research Institute

<https://archive.org/details/chinapainting00lewi>

CHINA PAINTING.



485 from W.D.
1883

CHINA PAINTING.

BY

FLORENCE LEWIS.

WITH

SIXTEEN ORIGINAL COLOURED PLATES.



CASSELL & COMPANY, LIMITED:

LONDON, PARIS & NEW YORK.

1883.

[ALL RIGHTS RESERVED.]

CHINA PAINTING.

CHAPTER I.

GENERAL INTRODUCTION.



BLACKBERRYING.

(By Mrs. Sparkes.)

IN commencing the study of China Painting, it will be well if the student starts with the firm determination of completely mastering the use of his materials. Even though he may be proficient in oils or water colours, the *technique* is so different that it will be necessary to begin at the very beginning.

If the student knows nothing of pottery painting, by all means let him begin with over-glaze in preference to under-glaze painting. In the former, all faults (for instance, brush marks, insufficient dabbing, the use of too much turpentine, too much or too little oil) are apparent on the surface. They are only too visible the instant they are perpetrated. There is seen to be something obviously wrong; and if the student does not know how to remedy it, he feels (if he is a conscientious worker) that the least he can do is to take it out, and hope for more skill in a second attempt. But in under-glaze painting, work often has the appearance of

being very tolerably well done until it is glazed and fired, when brush marks, bad edges and harsh lines start forth in a manner which is most unexpected and disappointing. As the size of this book will not allow both subjects to be treated, we shall confine our attention entirely to over-glaze painting; and throughout it must be remembered that the colours mentioned are invariably over-glaze or enamel colours. Enamel colours should be kept carefully apart from under-glaze colours, as the smallest grain of the latter mixed with the former, would completely spoil the effect. The same remark applies to oil paints, and even to the turpentine in which brushes used for them or for under-glaze colours have been rinsed.

In choosing your earthenware or china, notice that the glaze is smooth and even, without specks of any sort, and not crazed.* There are so many good colour makers, each having some advantage peculiar to himself, that it is difficult at first to know which to choose; but it is best in a general way to get all one's colours from the same maker, as they are then more likely to be all fusible at the same degree of heat. It is well also to assure oneself of this by insisting on seeing the maker's test palette, with *all* the colours fired at one and the same heat. If, however, you are strongly tempted, as you often will be, by a particular colour of some other make than those you are using, do not finally adopt it without several preliminary trials, as it might be either harder or softer,† and your work would not then appear evenly glazed.

The colours mentioned in the following pages are manufactured by Messrs. Hancock and Son, Worcester, and M. A. Lacroix, Paris; and in mentioning the colours of the former, I invariably refer

* The plates sold by Messrs. Howell and James and stamped at the back with their name and "special make," are excellent, and leave nothing to be desired.

† That is, requiring either a greater or less degree of heat in order to fuse it.

to the new moist water-colours (sold in pans, half-pans, and tubes), which, except in the matter of preparation, are identical with their well-known dry colours ; but I wish students to clearly understand, that if they use Lacroix's colours, it is much better to have the *dry* ones, as those which are mixed with oil in the tubes are apt occasionally to become too fat, and to the taste of many people they are not at all times sufficiently ground.

Both makers have many other colours besides those given below, but I think the beginner may become confused if he has too great a variety, and fail to learn the full value of any of them. It is always easy to enlarge his selection, as time and necessity point out.

The implements and colours immediately following are *absolutely* necessary. Those contained in the supplementary list will be found a great convenience after some progress has been made :—

- 1 Steel Palette Knife.
- 1 Glass Muller.
- 1 Hand Rest.
- 1 Medium-sized Dabber.
- 1 Small Dabber in Quill.
- 1 Sable Crow Writer.
- 1 Plate (glazed).

- 2 or 3 sizes of Camel's Hair Brushes
for China Painting.
- Several 6 in. or 8 in. Tiles (also glazed),
to be used for Palettes.*
- Turpentine.
- Fat Oil of Turpentine.
- Spirits of Lavender or Oil of Cloves.

* If Hancock's water-colours are being used, an ordinary china water-colour palette is more convenient ; but for dry colours, which require some little grinding, a tile answers best, as it stands more firmly. Also, with the former, Turpentine, Fat Oil, and Spirits of Lavender will not be required.

CHINA PAINTING.

HANCOCK'S MOIST WATER-COLOURS.

Deep Azure Blue.	Sepia.	Royal Purple.	Pearl Grey. Red.
Outremer Turquoise.	Vandyke Brown.	Deep Green.	Persian Yellow.
German Brown.	Deep Black.	Rose-Leaf Green.	Strong Yellow.
Olive Brown.	Grey Black.	Light Sèvres	White Enamel.
Brunswick Brown.	Carmine.	Dark Orange.	China Megilp.

LACROIX'S DRY COLOURS (FOR BEGINNERS).

Rouge Orangé.	Carmin No. 2.	Ocre.	Vert Noir.
Violet de Fer.	Pourpre Riche.	Brun No. 4.	White Enamel
Noir d'Ivoire.	Gris Perle.	Vert Chrome Riche.	(English).
Bleu Riche.	Jaune Orangé.	Vert Brun.	

SUPPLEMENTARY LIST (FOR THE MORE ADVANCED STUDENT).

Jaune à Mêler.	Vert Bleu Riche.	Brun No. 3.	I Ivory Palette
Rouge Chair No. 1.	Carmin No. 3.	Evans' Brown.*	Knife.

It has for many years been a great drawback to amateur China painters, that their friends and relatives could not be induced to think the smell of turpentine, and the stickiness of fat oil, agreeable

* May be bought of Messrs. Kennedy and Brown, 13, Oxford Street, W.

additions to a sitting room. To these and to many others, the moist water-colours prepared by Messrs. Hancock and Son will be found a great boon. They are, of course, entirely free from smell, nothing but a little water being really necessary for working them, though the specially prepared China Megilp, which takes the place of fat oil, will sometimes be found an assistance, as it serves to keep the colour moist for any length of time, and also keeps the brush in a good condition for working. If too much megilp is used, it will be very difficult to dry your work, which must have a good heat, by placing it in an oven, but, unlike fat oil, however much is used it cannot blister. After the first washes are laid it will always be advisable to dry your painting well at a fire before retouching it, as these colours will not dry by merely being exposed to the air. Consequently exposure does not in any way injure them on the palette. I have before me now some Red which has been squeezed from the tube for over three months and it is quite fit for use. In another respect they have a great advantage over any others, inasmuch as they may also be used like ordinary water-colours for painting on paper, silk, satin, etc. Students making a design on paper, with a view to carrying it out on china, will be greatly helped by this, as it is frequently very difficult to match with ceramic colours the effect which has been produced by ordinary water-colours. For water-colour painting on silk they are very convenient, being slightly opaque, without mixing with any extra white. This opacity is closely allied to their imperishable qualities, for being entirely *mineral* they will not change in any way. The same colours may also be used with water only, as a vehicle to paint upon prepared or unprepared board, canvas, etc., etc., and if they are treated exactly as oil-colours are, *i.e.*, mixing Enamel or Enamel-glazing with them, in place of the ordinary Flake White, and, after thoroughly drying before a fire, varnished with Hancock's Mineral Varnish, the effect produced is exactly similar to an oil-painting. The Mineral Varnish, which is very cheap, should alone be used,

as it enters into the chemical composition of the colours, both being mineral. It has the peculiarity of perfect flexibility, and may therefore be used on very thin materials. It is applied with a large soft brush; and, if not perfectly level, should be held before the fire for a few minutes, which will cause it to become so. It *dries* at once, but will not be thoroughly hard for a few days.

All the colours mentioned in the list will work freely together, with the exception of Brunswick Brown and Red, which will, however, mix together, and with Black or Purple, but not with the other colours.* Working with the moist water-colours will be found very pleasant, and, if they had been brought out some years ago, there is no doubt that many who have abandoned China painting, as too difficult to master, would have been encouraged to continue their efforts. For sketching, use the crayon prepared for the purpose by Mr. Hancock, which, being of an oily nature, will not be washed out by the water-colour passing over it. It will, however, disappear completely in the firing. Let your china be perfectly dry before sketching upon it. The manner of working is very much the same as if the colours were mixed with oil. The brush must be kept square, and the wash of colour may be retouched again and again in order to make it smooth. If a large space is to be covered use the dabber, as described in the letterpress connected with Plate II., which treats of laying a background. More water or megilp may be added as occasion requires; but too much of the former is apt to produce a very washy appearance, and if too much of the latter is used the colour will take a long while to dry. For a broad sweep of colour, a combination of the two is best. When the ground is laid, if your drawing is of such a nature that you have been obliged to take the colour

* For full details of the respective peculiarities of each colour, the student cannot do better than refer to the little handbook, "China Colours and How to Use Them," written by Mr. Hancock, or his large and comprehensive work, "The Amateur Pottery and Glass Painter."

over it, you may clear out your design with great ease, by merely washing away the surplus colour with a brush just moistened with water, but care must be taken that the brush is not too wet, lest the work should be made messy. The pattern may also be cleared out either with a penknife or with the pointed end of a brush-handle. These colours are perfectly well ground, and free from grit. One of the few technical difficulties connected with their use will be overcome if the student will *never* try to shade his work without drying the first washes at the fire. When these colours are dry they are easy to work upon, but I cannot sufficiently impress upon the student that, as before stated, *they will not dry of their own accord*. If the under washes are disturbed, it will show that these remarks have not been attended to.

With reference to the French colours, it must be borne in mind that the Iron



DISH, PERSIAN DESIGN.

(Painted by Lady Rawlinson. Awarded "The Countess of Warwick's" Prize in the Annual Exhibition of Paintings on China, 1879, held in Messrs. Howell and James' Art Galleries, 5, 7, 9, Regent Street S.W.)

Reds (all Reds of a brick-dust shade) will mix with each other, or with Black or Violet de Fer, and, to a moderate extent, with Jaune à Mêler, or Jaune d'Ivoire, but not with other colours. If mixed with Carmine, Blue, &c., and fired, the Red would all disappear. However, if a little thought is bestowed on the subject, this is no very great disadvantage, as by using Jaune à Mêler as a sort of go-between, you may blend or graduate Red into almost any other colour you wish. Say, for example, that you desire to shade Red into Green; a good Green for the purpose can be made with Noir d'Ivoire and Jaune à Mêler, both of which colours will mix with Red. Or if a brighter green is required, put plenty of oil into your Jaune à Mêler, and, with different brushes, wash the Red on to one end of the space to be covered, and the Green on to the other, blending them with Jaune à Mêler in the middle. If well done, the effect should be smooth and the gradation uniform; but if you use too little oil, the colours will join with a harsh line. Ocre is useful for shading Yellow, or, used by itself, for the warm glow in a sunset sky; but it will not mix at all satisfactorily with greens. All the other colours will mix freely together; but after a little experience you will find that Browns are very apt to fire out, *i.e.*, to disappear in the firing, leaving the other colour with which they were mixed somewhat of the same tone as if it had been used pure; you will also find that Blues, Purples, and Carmines are very strong in their effect, being apt, when mixed with other colours, to show more after they are fired than before.* White Enamel is most useful for little touches

* Gris Perle and Jaune d'Ivoire are extremely useful for their glazing qualities. If you have used any hard colour which looks dull after firing, a pale wash of either of these paints will make it shine on a second firing. They may be used in this way if preferred instead of flux; but the student should notice that, even after they are fired, it is never safe to put flux over any of the Iron Reds or over Ocre, nor, with the French colours, over the different Browns. With Hancock's colours, enamel-glazing represents flux.

of relief, or for painting on terra-cotta. It must be kept scrupulously clean, and a separate palette should be reserved for it, a glass one being preferable to an ordinary tile. Never grind it with a steel knife, but use a glass muller or ivory palette-knife; otherwise it will probably be discoloured on firing. If in painting with Enamel you find it is inclined to spread, breathe into the colour on your palette, at the same time mixing it with a little more turpentine. As you require to put it on rather thickly, do not use too much oil. The only Enamels available for amateurs that I have ever found thoroughly satisfactory are those sold by Mr. Battam, Johnson's Court, Fleet Street,* and those manufactured by Messrs. Hancock and Sons, Worcester. Both makers supply hard and soft enamel. The latter may be used alone in a general way, but if through a hot firing it becomes a little too smooth and soft, or if for any special purpose you wish for some very crisp, sharp touches, make use of the hard enamel in the second painting. The hand-rest, if placed over your work, for your hand to rest on whilst painting, will greatly help you to avoid rubbing or scratching your work, to which beginners are very prone. It will also assist you to acquire a light touch. A table easel is a convenience, as it will save much stooping, and you can also see the general effect of your work better when it is not flat on the table. Probably the most convenient thing of the sort is a little easel designed by Mr. Hancock, which has an apparatus (much needed) for keeping the plate steady. Another luxury prepared by Mr. Hancock, for the use of China painters, is the "Vade Mecum." This is a desk, most conveniently formed, for holding all the necessary apparatus for China painting. At the bottom is a drawer, with divisions for colours, brushes, palette, knife, etc. The lid, on being lifted, displays plenty of stowage room, and a stand for pots and bottles. Outside the desk is a movable hand rest,

* I may here mention that Mr. Battam, and also Messrs. Kennedy and Brown, of No. 13, Oxford Street, undertake the firing of over-glaze paintings.

and at the further end is a space on which to stand a palette, and another for the mediums. Whilst painting at the desk, lean your right arm upon the sloping lid, with your wrist on the hand-rest, then with your left hand steady your work, if it is a tile or plate, beneath the projecting ledge. The student will find this to be far more convenient than an ordinary hand-rest, as it combines all the advantages of a painter's table. Dabbers are used for causing backgrounds and other broad washes to lie flat and even, after the colour has been laid with an ordinary brush. In choosing ordinary brushes, select those which are quite square at the end, with the hairs all of an even length. This is most important. The crow-writer is for outlining, as a good line cannot be made with a brush having short hairs. A small sable-hair water-colour brush is the most convenient for stippling, when necessary; and another for sketching with Indian Ink. Turpentine and fat oil of turpentine are the mediums used in China painting; and if you wish to lay a very large wash, or for any reason to keep your colours moist for an unusually long time, a few drops of spirits of lavender will be an assistance. This will also cause your painting when quite dry to adhere with great persistency to the China, making it easy to work upon afterwards. The fat oil sold by Messrs. Lechertier, Barbe and Co. is very trustworthy; but it is far better to make your own; for which purpose pour a little turpentine into a saucer, and leave it exposed to the air, when the spirit will evaporate, making the saucer sticky. If you continue to add a little turpentine every few days for about three weeks, you will procure a supply of oil. Occasionally fill a small bottle for use from the saucer, and keep up the supply by adding fresh turpentine every few days.

If you are painting every day, it is quite sufficient to thoroughly rinse your brushes with turpentine before putting them away, but I cannot too strongly impress upon the student the necessity of keeping them, and also the palettes, scrupulously clean.

A rag is quite indispensable, but let it be of a very smooth nature, say an old silk or cambric handkerchief, otherwise you will be troubled with threads, fluff, and dust on your work. In grinding your colours use turpentine, and either a palette knife or glass muller, and let them be ground thoroughly fine before adding the fat oil; otherwise you will find it impossible to grind really well; as, if there is any oil mixed with it, the knife does not grasp the colour. It is a very good plan to grind the colours first with turpentine, then let them dry, and afterwards, when ready to use them, mix them with the fat oil first; but students are not generally sufficiently willing to take time by the forelock, to do this. Fat oil will cause what at first will seem your chief difficulty, namely, in determining what is the proper quantity to be used. If your painting is to be pale you may use plenty of oil with impunity; but if it is to be dark, and the colour is laid on thickly, too much will make it blister in the firing. At the same time, if there is not enough, your paint will hardly adhere to the china; you will have the utmost difficulty in laying a smooth wash, and your work will always look scratchy and messy, full of brush-marks and other imperfections. I find with beginners a great deal more work spoilt for want of oil than by having too much. A great number of students consider that there is something virtuous in trying to work almost without this most necessary medium; saying, in support of this notion, that they are afraid of their work blistering. The one fault, however, is as bad as the other, and by cherishing it, as students often do, you will never learn what is the right amount. It is a very good plan to keep a little oil made somewhat thinner by the addition of a little turpentine, on one corner of your palette, so that when you wish to paint anything which is very pale, you may take an extra supply into your brush; but be careful only to have a small quantity on your palette at a time, otherwise it will be liable to run into your colours. More oil should be used in the first washes than in the shading; and after a little experience you will be able to tell by the rate at

which your work dries, whether or not you have enough, too little, or too much. If your painting looks very dry and powdery, almost as soon as it is washed in, it shows that more oil was required; but if after a few hours it looks shiny and sticky, it must, if it is a thick coating of colour, be taken out; for it will be pretty certain to blister in the firing.

If you have any facility in drawing, I should recommend you to sketch your work with Indian Ink, *water-colour* Carmine, or Smoke; and if with the first, let it be of the first quality, or there may be impurities in it which will remain after firing. If the last is used, it is merely necessary to hold a saucer, or tile, over the flame of a candle, and then use the carbon which it collects with a little Turpentine. If your design is very elaborate and you wish to trace it, you may do so by making use of either of the following methods. First and least objectionable is the process known as pouncing. Arrange a piece of tracing paper over your design, and with a fine hard pencil make a careful outline of your drawing. When this is complete, place it on a cushion or anything soft, and with a fine needle, prick along every line. Finally, arrange your tracing on your plate, secure it at the corners with a wafer; and dust over it with a little black lead or fine charcoal powder. The drawing will by this means be transferred to your plate in a series of dotted lines. It is then ready to be sketched with Indian Ink. Afterwards remove all the dust with a soft brush or cloth, or it may interfere with your painting.

The second process is to place a sheet of black-tracing paper on the china, and over it your tracing; then go over all the lines again with a hard fine-pointed pencil, or the sharp end of a porcupine quill. The pattern so transferred to the china should be strengthened and corrected with a fine brush and Indian Ink. This process is quicker, but it is also dirtier, and you are more likely to lose the delicacy of your drawing, although in simple conventional borders there is no objec-

tion to this method being used. As the great advantage which amateurs possess over professional China painters is the power of spending unlimited time over the smallest piece of work, they should never run the risk of spoiling their painting by using inferior methods. And before I leave this subject, I must point the attention of amateurs to the fact that everyone, without exception, may be *careful* if they choose; they may learn to put on a flat wash of colour; they may refrain from putting their fingers on it whilst it is wet; and they may keep within the bounds of their outline. If all students would realise this fact, and act upon it, how much bad work we should be spared; for in China painting neatness and cleanliness go more than half way towards ensuring a good result.

Whichever method of tracing you may make use of, do not dispense with the after-sketching. Besides the advantage of correcting the drawing, which will probably be very needful, the dust used in the first process will impede the flow of your colour, and the transfer paper of the second will smear in every direction as soon as it is touched by a wet brush. Some China painters make a very free use, and with excellent effect, of an ink for which a friend has sent me the following recipe. It can be used with a pen, and is extremely useful for anything that is rather slight, or for Japanese studies. The Italian design in the page devoted to conventional borders would be better copied by making use of the vitrifiable ink than by any other means:—

Vitrifiable Ink:—"Take any one of the following four colours: Black, Pompadour Red (German), Purple Brown (English), or Bitumen (Brun No. 3). Grind it with a little water, and leave it to dry; then mix with a little evaporated vinegar, and a few drops of solution of gum arabic. This mixture should be put into a small china pot, like those used by chemists for lip salve, and kept thin by occasionally stirring a little vinegar into it. The vinegar used should be previously kept for a few days in a bottle without a stopper, in order to allow some of the acidity to evaporate, as strong

vinegar is liable to make the ink muddy, in which case it does not flow so easily through the pen. Before using, it must be well stirred, as the colour sinks to the bottom.

“Before sketching with this ink on china the ware must be prepared thus :—Pour on the plate or dish a little vinegar and three or four drops of gum arabic, which must be rubbed all over the surface, with a clean soft rag, and left to dry. Gum water is sometimes used alone ; but it is best to add some vinegar, as the acidity cleans the glaze and makes the gum adhere more perfectly to the surface. When the plate is perfectly dry, the outline of the picture should be drawn in with lithographic chalk or pencil. The outline completed, cover it and correct it with the vitrifiable ink, applied by means of an etching pen or fine paint brush, taking care to draw the lines of even thickness. Turpentine will not remove the ink, but water will ; a drawing can be painted, and rubbed out with turpentine over and over again, without injuring the outline or altering the drawing.”

To beginners, who will probably have to rub out their early work, and who have much difficulty in laying a background, this ink will be a great help. An outline in Indian Ink will not generally allow of the ground being rubbed out more than once ; although occasionally, if the Indian Ink sketch is dark, the colour may be removed several times by softening the paint very thoroughly with turpentine, and then rubbing it off with a clean soft rag. In trying to save the sketch, students are apt to leave the china in a smeary condition, which is a fatal fault. Before beginning to paint, always see that the ware is perfectly clean and bright.

Students making use of this book will probably begin by copying the plates ; but to those who are prepared to choose their own subjects a little advice on the matter will not, I hope, be unacceptable. On the choice of the subject mainly depends the interest of the work. Those who can sketch from nature will probably use their own sketches, and those who have never done so, will do well to

make an attempt, remembering that a study from nature, if it is earnestly and carefully worked out to the best of the student's ability, will be far more pleasing and meritorious than other people's ideas at second hand. In beginning the art of China painting, it is much more important to learn something from each thing you undertake, than to perpetuate some feeble design which you or your friends for the moment may imagine more pleasing. Therefore for at least the first six or twelve months, avoid tea-cups and saucers, small toilet-sets, and especially sleeve-links, buttons, smelling-bottles, and other small fancy objects. When you can paint a large plate, you can descend to these trifles or not, as you please; but they will not help you to paint in a broad style. It is a familiar weakness of students, who have not learnt to lay a flat wash of colour, to wish to paint mignonette, forget-me-nots, maiden-hair fern, or the tiniest heaths and grasses, regardless of the fact that for preliminary lessons these things are, at the best, mere waste of time, and will never bring the beginner a step nearer to perfection.

Flags always make an improving study, and for colour they present an infinite variety. Purple, or Purple and White, look very well against a background of pale Ocre shading into Brown; or the ground may be pale Brown Green (Vert Brun No. 7) shading into the same colour mixed with Brown; or if a ground dark all over is preferred, Black Green, with plenty of Brown No. 4 in it, will look very well. Narcissus, jonquils, and daffodils, either with or without wallflowers, always look well, and come at a time of year when it is rather difficult to find subjects. The same may be said of almond blossom, which is rather apt to be wanting in interest by itself, in the hands of a beginner, but makes a charming companion to other things. One of the most attractive paintings I ever saw by that master of flower painting, M. G. Léonce, represented some pansies, dark and light, and a spray of almond blossom. While I am mentioning the painting of this artist, let me beg the student to lose no

opportunity of studying it. To anyone really anxious to improve, it is well worth while to travel twenty or thirty miles to get an opportunity of examining one of his higher efforts; of which many examples may be seen at the galleries of Messrs. Howell and James.

Wild roses, ox-eye daisies, marsh marigolds, lilies of any sort (excepting those of the valley), fox-glove, Virginia creeper, azalea, rhododendron, clematis, hollyhock, gladiolus, chrysanthemum, and many other plants, may be attempted with advantage; in fact, almost any flower which is simple and of a tolerable size, if well treated, will have a good effect. Roses are too difficult for any excepting those well practised in drawing. Those who wish to paint fuchsias, geraniums, or any sort of pelargoniums, may be advised first to consider well their own capacity for rendering a most uninteresting subject pleasing. Such efforts generally end in being rubbed out.

If you wish to put a border to a plate, where flowers are represented in the centre, it looks well to *conventionalise* the same plant for the border. If the border is very wide, it is often improved by little panels reintroducing the *natural* subject. Whatever you may have in the centre of the plate, be careful to make both the colouring and design of the margin subservient to it, and let the former especially be in the same key. Nothing looks worse than to start an entirely fresh style of colour for the border of the plate.

If you are inclined to do heads or figure subjects, the remarks I have just made about using your own sketches from nature do not exactly apply, because without a great deal of practice and instruction in drawing, your attempts, however praiseworthy, will naturally be crude and unfinished, and will not work out well. In this case it is best to find a good copy, which is easy enough, as there are numerous excellent photographs and prints to be had for the searching. In doing this, remember that it is far easier to imagine *colour* than *form*, or the balance of light and shade.

As a rule, students who are inexperienced, if they have not a very decided "eye" for colour, are apt to make it too cold. This is a mistake, as warm tints are invariably more pleasing. There are many warm shades of grey: therefore do not make a cold bluish mixture and use it for everything. For instance, the shade on yellow is a warm, greenish hue; and white looks far better if the shadows are somewhat of a pearl grey. It must be also taken into consideration, as I have before remarked, that blues are inclined to fire so very strongly, that paintings are always more liable to look cold, after passing through the kiln than before. The following list of complementary colours may be a help to those who have not thought much on the subject. The primary colours being Red, Blue and Yellow, it is necessary for a good effect of colour that these should be represented with more or less modification. The student will see at a glance that the complementary colour provides what is wanting to the primary to make the trio (Red, Blue and Yellow) complete. If you consider this a little, you will see the general necessity of warm colouring; as two of the three primaries, Red and Yellow, are decidedly hot:—

Of Red, the Complement is Green.

„ Yellow	„	Violet.
„ Blue	„	Orange.

Of course, this list is extremely simple, but the same idea enlarged upon will carry you through many subtle varieties of colour.

For figures painted in a slight style, such as those done by the followers of Miss Kate Greenaway, the vitrifiable ink previously described will be found a great help, as it will assist to

keep the outline fine and clear. In painting heads, if you have any control over your brush (without which I urgently recommend you to delay starting on figures or heads), endeavour to dabble in the broad shadows as much as possible while the flesh tint is wet, as by this means a rounder effect, and softer gradation of tone is obtained, than by painting the shadows after the first washes are dry. If by these means you suggest a tolerable effect of light and shade, do not do much stippling to the flesh until after the first firing. In anything for which roundness is required, the dabber is an invaluable ally; for flesh tints, draperies, fruit, and many other things, it is quite indispensable; but I cannot leave the subject without mentioning the fear I always feel on introducing the use of a dabber to students, namely, that they will dabble everything. This practice is a mistake; for in many things, such as leaves, flowers, the plumage of birds, or hair, &c., brush-marks, judiciously left or introduced, greatly help the appearance of texture. Care must especially be taken to make them lie in the right direction. In painting hair, treat it as broadly as possible. Inexperienced pupils are inclined to represent each individual hair, the effect naturally being niggling, scratchy, and unsuccessful. In painting fruit have plenty of colour on your palette of every shade you need; and, as in flesh tints, try to get as much effect as possible whilst the first tint is wet. A few drops of spirits of lavender will help to keep the colour moist, and as long as it remains so, you may constantly touch and retouch it, adding shadow in one place, colour in another, or dabbling off either the one or the other in a third, until your fruit looks almost finished. If for any painting of this kind you are likely to require a second firing, do not touch it when once it is dry, until after it has been fired. Then it may be worked up to something very near perfection by the same means. But in painting heads some stippling is sure to be necessary.

In painting birds, do not put a pale wash on first, and then work over it, but move your

brush in the direction that the plumage takes, so that every brush-mark may represent a feather. If there are little lights on the plumage, they can easily be removed while the colour is wet, by sharply touching them with a clean brush, in which is as little turpentine as will suffice to keep the hairs together. It is a good plan, before painting the plumage, to draw the outline of the beak, claws, and eyes with Black.

The same advice as to dabbing which I have offered to those who intend painting figures or fruit, will apply to work of the landscape painter; especially in the sky, distance, and middle distance; for the first firing, it is most important to dabble it, and *leave it alone*. After you have had some practice you can judge for yourself what method to pursue; but inexperienced students are apt to sit so close over their work that they lose all notion of the general effect. They often put so much shading on



GATHERING SPRING FLOWERS.

(By Miss Linnie Watt.)

to mountains, sky, or distant fields, after the first washes are dry, as to give a prominent appearance to what is intended to lie in the distance.

Be very careful to keep the foreground quite warm in colour. Coldness will here have a most unpleasing effect, besides tending to throw the foreground backwards.

CHAPTER II.

COLOURS.

IN looking through any list of materials for China painting, you will notice many articles which I have not put down, as I go on the principle of teaching my pupils to aim at walking without crutches. But amongst them you will in many lists observe a wheel or whirling-table, which is a great assistance. This was omitted above, first, because amateurs do not generally make very good liners, even if they have a wheel; and, secondly, because, if you give the order, lines can readily be put to the edge of your plates, vases, &c., when it is sent to be fired. If, however, you have a wheel, use it in the following manner:—Place the centre of your plate exactly over the centre of the wheel, and, to judge whether you have done so, hold your hand perfectly still, with your finger touching the edge of the plate; then whirl the wheel round, and if the rim continues to touch your finger quite evenly, the position of it is true, and the plate is ready to be lined. Fill your outlining brush with colour (the crow-writer, or, if it is a very large circle that you wish to make, a duck-

writer will hold more colour, and so answer your purpose better); then placing your arm on a rest, let the hand which holds the brush be perfectly still; move the wheel round, so that if the brush just rests on the edge of the plate, a perfect line will be transcribed. To make it *perfect* will require some practice, for lining, although a very mechanical art, takes some time before it can be done well.

You will also find that I have not mentioned any of the colours which are to be used solely for backgrounds, as I prefer to recommend those colours which can be used for every purpose. If, however, you find some special colour in the published lists, of which you know the effect, which cannot be produced with what you have, you can procure it, and prepare it for use in exactly the same way as ordinary colours. If, for instance, you wish for a really cream-coloured ground, and are not satisfied with



SYCAMORE.

(By Miss Ada Hanbury.)

pale Orange Yellow, pale Mixing Yellow, or pale Ochre, you may have recourse to Chinese Yellow (Jaune Chinois). In the English colours, Orange put on very thinly makes an extremely pleasing Cream or Buff-coloured ground. This is a most useful colour, which has no equivalent among the French colours. It will mix freely with anything excepting red, and is of great service for warm tints in leaves, or for the foliage of trees, &c. Olive Brown is another colour which stands alone, and will endear itself very much to the China painter. Pale Sèvres Green, or pale Old Tile Blue, shading into Olive Brown, will be found very attractive for backgrounds.

Students who are quite near the beginning often wish for a Pink ground ; but this, or Lilac, is a great mistake from a decorative point of view. The nearest approach to Pink which is not unpleasing, is made by very pale Rouge Chair No. 1, or Brunswick Brown, which makes a flame colour, and if pale enough has a pretty effect upon quite small pieces of decoration. The accompanying ornament, however, must be kept very subdued in colour.

For a pale Blue ground, a little Rich Chrome Green added either to Rich Blue or Rich Blue Green will be found to improve the colour ; or a little of any sort of Yellow may take the place of the Green. For a Greyish Blue, add a very little Carmine and Yellow to Rich Blue, but be careful not to overdo the Carmine. With Hancock's colours, use Old Tile Blue, Blue Green, or Azure Blue, mixed with a little Roseleaf Green.

Grass Green (Vert Pré) very thin makes a pretty delicate colour ; and for a pale dull Green you may use either Brown Green, Black Green and Brown, or Black with plenty of Yellow in it. The same colours put on thickly will make good dark backgrounds. With the English colours, a thin wash of Sèvres Green, Deep Green, and for a warmer colour, Olive Brown, will be found a very pleasant addition to either of these.

For a Dark Peacock Blue, mix with Rich Blue Green, Rich Chrome Green and Black Green ; the two latter without the former make an excellent dark green ground ; or Deep Azure mixed with Roseleaf Green and Deep Green.

For Chocolate, use Violet of Iron (but be careful to make it very thick, or the effect will be extremely poor), or Hancock's Chocolate Brown.

The colour called Rich Red Brown (Brun Rouge Riche) makes a very attractive Dark Red for a background ; also Brunswick Brown, which very much resembles it. Another pretty pale ground is made with Pearl Grey.

Turquoise Blue—which you may wish to use some day, though I have not even put it down amongst the desirable luxuries—must be used very thickly indeed, or you do not attain the full richness of the colour. Before I leave this subject of backgrounds, I must warn you to keep them quite free from dust, which always seems particularly attracted towards a wet plate. At the same time, if you place it in a drawer, box, or anywhere to keep it free from dust, until it is dry, do not exclude all air, or your work will not dry fast enough. If a plate is small, it may be dried by being placed in the oven for a few minutes ; but, if it is too large for that purpose, do not hold it before the fire, as the heat may strike it unevenly, and cause it to split in two, without you gradually warm it, first of all.

Scratching out a design, if it is at all elaborate, is rather a trial to the patience ; but it is a trial which it is best to endure, until you have had a good deal of practice. *Then*, if you prefer it, you may erase your pattern by the following means :—

Grind some Rouge Orangé, or any other Red, with *spike oil* instead of turpentine, and, as a substitute for fat oil, mix the colour with a few drops of *castor oil*, just sufficient to make it flow ; and, when the background is extremely dry, paint carefully over those parts of it which you wish to remove, with the



THE ANGLER CAUGHT.

(By E. Langstaffe.)

One of the few things which may happen to a plate in the firing, which cannot be laid more or less to the account of the artist, is when the glaze bubbles all over, giving the surface of the ware much the appearance of a nutmeg grater. This is apt to happen if the glaze of the plate is too soft or if the firing has been too hot: it is usually caused by a combination of both causes.

mixture described above, and then leave it to stand for about ten minutes. Finally, wipe a soft rag over the design, and it will come out quite cleanly. It is the spike oil which eats away the colour, the other two ingredients are merely the necessary vehicles for using it. You will not be likely to succeed with this mixture until you feel quite at home with your materials.

In China painting the best plan is to consider it quite impossible to erase anything after firing; but if it is ever absolutely necessary to do so, you must use fluoric acid, dipping, say, a long darning needle or the point of a fine penknife, into the bottle of acid, and then hold it exactly on whatever you wish to remove. In a few moments it will eat away the colour, but its use is very dangerous; for it will also eat away your hand, or anything else it may touch, if it has the slightest opportunity. I advise the amateur to avoid it altogether.

CHAPTER III.

PAINTING ON TERRA-COTTA.

PAINTING on terra-cotta in oil or water colour is much affected by amateurs, but I incline to think this a spurious form of art. In my opinion, nothing should be added to any sort of pottery except what is capable of becoming a part of itself.

In painting on *terra-cotta* it is best to treat your whole subject first of all in light and shade, with white enamel, using it thinly for the shadows, and thickly in the lights. As the unglazed pottery



CHRYSANTHEMUMS.
(By Miss Florence Lewis.)

is more absorbent than the glazed, more oil is required in the enamel when used for this purpose than for ordinary work. Remember that the brush must never be filled with enamel, but take as much



LAMBETH FAIENCE VASE.

*(With Indian Design in reddish-brown and purple,
on a ground the natural colour of the ware.
Height about 14 inches.)*

on the tip as it will hold, and you will require to replenish it for every brush-mark. It will not be found at all easy to do this well, as white enamel is difficult to lay on cleanly and smoothly, until the student has had a good deal of practice. When the whole design has been painted in this manner, it must be fired, and then, if the white has been put on sufficiently thickly, the design will be glazed. You may then tint it with the ordinary china-painting colours, and have it refired. The chief difficulty in painting on terra cotta will be overcome if your subject is well chosen. Let the flowers be of a simple, open nature, such as daisies, hawthorn, blackthorn, wild roses, any sort of fruit blossom, buttercups, or primroses. Any of these and many others are very appropriate, and look well; but if the student attempts anything of a bell-shaped nature, or, worse still, anything elaborate, such as columbine or antirrhinum, success will be most difficult of attainment. Colours should be very subdued on terra-cotta; pale Yellows, White, Dull Greens, and Browns, all look well, with perhaps a little Turquoise Blue. It is best for the student not to paint on terra-cotta until

he can conscientiously assure himself that his taste is well trained, and his manipulation good.

It is quite allowable to mix colours with the enamel for the first firing, but there is no advantage in doing so ; as the enamel makes too rough a surface for shading upon, and it, therefore, requires a second firing before it can be finished. If, however, for anything very simple, you wish to try it, let the proportions be about four of enamel, to one of colour.

Coloured glazed plates and tiles may also be painted in the manner described for terra-cotta. Beautiful shades are to be had of Celadon, Chocolate, Orange, Blue, Green, and others.

On glancing through the pages which I have written, I cannot but think how feeble are my words, in comparison with the emphasis which I should wish to give them ; but I hope that the student will believe that everything I have said I absolutely mean, and wish to be carried out ; and I firmly believe that by following these rules, the technical difficulties of China painting may be overcome without personal instruction, although I need hardly say that much time and disappointment is saved by having good lessons when the opportunity is at hand.

I now wish you all success in pursuing this branch of decoration, and as a preliminary lesson will refer you to Plate I.



PLATE I.

Take some Red, or *Rouge Orangé*, mix it with oil, or megilp, and then practise laying flat washes of different strengths with your largest china-painting brush. You will observe that these brushes are made square at the ends, and in working, it is most important to keep them so. Let your brush be filled evenly with colour, and lay a wash of any strength or size you like; then with the broad side of your brush touch it lightly in different directions, until you cannot tell which way it was worked. In painting leaves or flowers, always take your brush in the direction of the fibres, veins, etc., as then any brush marks showing will help the texture, which you wish to represent. Any important veins, such as those in the rose-leaf in Plate I., may be taken out whilst the paint is wet, by drawing the sharp side of the brush down the vein. For this purpose the brush must have no colour in it, and only sufficient turpentine or megilp to make the hairs stick together. You will notice that if you keep the brush square, it is like a chisel, broad one way and sharp the other. If the moist colours are being used, the manipulation must be the same, but merely mix the colour with a little water or megilp. Use Red for your preliminary efforts.





PLATE II.

Olive Brown, Sèvres Green	...	...	...	<i>Vert Brun.</i>
Dark Orange	...	...	...	<i>Ocre.</i>
Sepia	...	...	...	<i>Brun No. 4.</i>

Plate II. represents the manner of laying in a background; and of all the illustrations this will be the most easily mastered. For the flat grounds, mix Olive Brown and a little Sèvres Green, adding plenty of oil or megilp for the paler shade. With your largest brush, wash the colour on just one degree darker than you wish it to remain; and then, whilst the paint is quite wet, dabble it with your dabber, until it is quite smooth, holding the dabber upright upon the work. If you find that the ground looks messy and sticky, a clean dabber will frequently remedy the evil.*

For the shaded ground, mix Dark Orange and Sepia with decidedly more megilp, or oil, in the Orange than in the Brown, or Olive Brown and strong Yellow. Wash on the Orange first, and then blend the Brown into it with your broad brush, and in dabbing a shaded ground, remember always to dab the lightest part first. When washing in a graduated tint, it is best to exaggerate the effect of light and depth which you wish to represent, as the dabbing tends to reduce them to the same tone.

* Let your first background be about 6 in. square; but if, when you wish to cover a very large surface, you find much difficulty in doing so whilst the colour is moist, some extra megilp or a few drops of Spirits of Lavender will be an assistance.

PLATES III, IV., AND V.

Roseleaf Green	...	...	...	...	...	<i>Vert Chrome Riche.</i>
Strong Yellow	...	..	...	...	...	<i>Jaune Orangé.</i>
Vandyke Brown	...	...	...	...	...	<i>Ocre.</i>
German Brown	...	...	...	...	...	<i>Brun No. 4.</i>
Carmin	...	...	...	...	...	<i>Carmin No. 2.</i>
Royal Purple	...	...	...	...	...	<i>Pourpre Riche.</i>
Pearl Grey	...	...	...	...	...	<i>Gris Perle.</i>
Azure Blue	...	...	...	...	...	<i>Bleu Riche.</i>

In the study of apple-blossom I show you the first washes, and how it will appear both before and after the firing; and I have for this purpose chosen a subject introducing Carmin, as in over-glaze painting it is the colour which alters more than any other in the firing. You will also notice that the Browns are liable somewhat to disappear when mixed with other colours; therefore make your Greens less vivid than you wish them finally to remain. The English Browns, however, are more capable of holding their own, so that the above remark does not so well apply to them. Sketch your spray with Lithographic Chalk, Indian Ink, or Smoke, then lay your background, which may be made with Roseleaf Green and Azure Blue, and plenty of megilp, or oil. You must now put your work on one side until the ground is sufficiently dry for you to scratch out the pattern, which, if you





are using the water-colours, will be almost immediately, but with the oils it will probably be by the next day. If the background is hard, breathe well on whatever part you wish to remove, and then take it out with your penknife. For the greyish lights on the leaves mix Azure Blue and Strong Yellow. For the brighter greens, Roseleaf Green and Strong Yellow. For the dull greens, add brown to the two last-named colours. For the grey, to shade the flowers, mix Pearl Grey and a little Carmine.

For shading the green leaves, Roseleaf Green and plenty of German Brown will be principally needed, though a little Strong Yellow may be desirable here and there. For the darkest touches in the Carmine, a little Royal Purple may be added to the Carmine, but let it be most sparingly used, as it is a very strong colour.

Before leaving the subject of Carmine, I will again remind the student that it is a colour which should always be ground with a glass muller, or the purity of the tint will be spoilt. Inexperienced students are generally very unhappy the first time they use Carmine, wishing for the vivid tint bearing that name in water-colours and oils. It is, however, best always to accept necessities with a good grace, and as that full depth cannot be brought out of ceramic colours, do not be led into using the paint too thickly, or the effect will be very unpleasant. The French Carmine, as may be seen in the illustration, is a very good colour, when used pure and properly fired; and Hancock's Carmine is deservedly famous for its delicacy and brightness, and looks very well even before firing.

For the centres of the flowers, lay a wash of Strong Yellow, and, when dry, scratch out the light stamens, and wash them over with a paler coating of the same colour; or, if the student prefers, instead of the wash of paler colour, some white enamel may be mixed with the Yellow, about four parts of the former to one of the latter, and the stamens delicately made out

in relief. Afterwards add some dark touches of Vandyke and German Brown. If, when you have had your work fired, you find the greens very violent, the carmines harsh, and your work altogether crude and unsatisfactory, finish it up again for a second firing, using any of the colours previously mentioned which will best answer your purpose. If carmine is over-fired it is apt to turn a mauvish colour, and if it is put on too thickly, or not sufficiently fired, it assumes a rusty yellow shade. You will remember that the fine Black outline in Plates III. and IV. represents the Indian Ink sketch, and will fire out. The student will so readily see about how nearly the colours of the different makers correspond to one another, that it will be unnecessary to specify each individual colour.



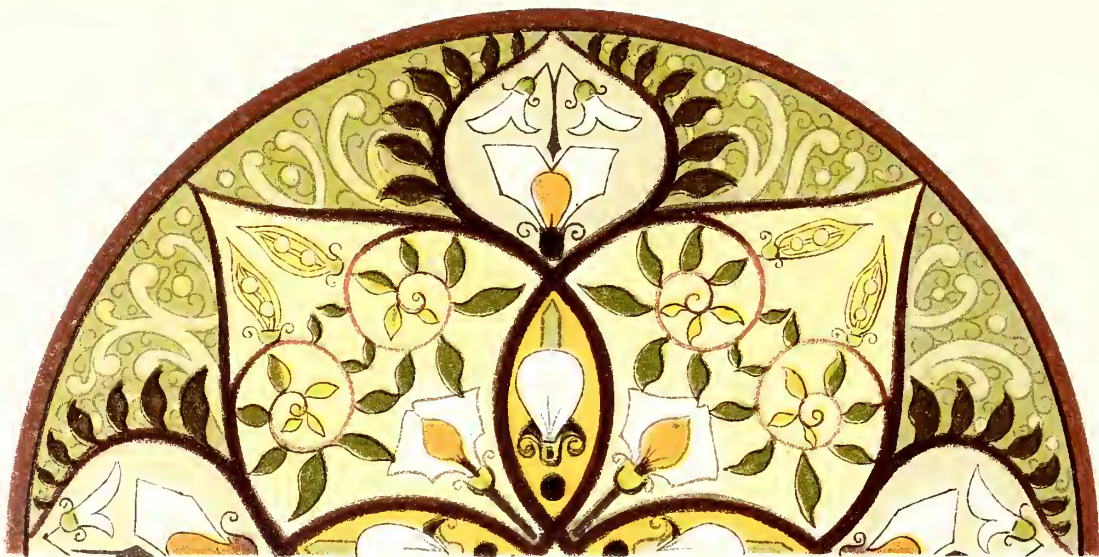


PLATE VI.

CONVENTIONAL DESIGN.

Deep Black	...	...	...	...	...	<i>Noir Corbeau.</i>
Strong Yellow	...	...	..	...	...	<i>Jaune Orangé.</i>
Dark Orange	...	...	...	...	...	<i>Ocre.</i>
Brunswick Brown	...	...	...	...	...	<i>Violet de Fer.</i>

The same colours will be required for the design for tiles, with the addition of the following :—

Carmine	...	...	...	...	...	<i>Carmin No. 2.</i>
German Brown	...	...	...	...	...	<i>Brun No. 4.*</i>
Roseleaf Green	}	...	...	...	...	<i>Vert Bleu Riche.</i>
Azure Blue						

When the design is drawn, mix Deep Black and Strong Yellow for the outer part of the background; and although it may seem strange to lay the edge of the ground first, when that same edge is the darker shade, it is best to do so, as if you dab a little pale yellow on to the green it will not greatly signify, but of course green dabbed on to the yellow will be a very obvious mistake. Next, mix Dark Orange for the orange divisions in the ground; and when those two colours are dry, Dark Orange, used thinly, for the lighter shade will complete it. For the outline and the band of colour

* The student will notice that the same colours are not always used to represent one another, as they have many little varieties. Those are chosen which best answer the purpose in hand.

at the edge, use Brunswick Brown, and remember that colour for outlining, being thick, must not have much oil, or megilp. If you have not a wheel, the band of colour at the rim had better be done for you when you have the plate fired. The leaves may be painted over the background.

Design for 5.6 in. tiles, suitable for a flower-box, the back of a washstand, or a fireplace. Use Brunswick Brown, for bands and outlining; Roseleaf Green and Azure Blue, for grounds of circles; German Brown, for corners.

A little Carmine will be useful in the breast of the bird. For the corners, dabble German Brown all over, and when quite dry paint the basket-work in outline over it, and then a little slight shading will complete it. Some White Enamel on the daisies, and on the under-part of the bird's wing, will be found an improvement.



PLATE VII.

KINGFISHER.—FIRST STAGE.

Azure Blue	...	...	...	...	...	<i>Bleu Riche.</i>
Roseleaf Green	...	...	...	...	...	<i>Vert Chrome Riche.</i>
Strong Yellow	...	...	...	...	...	<i>Jaune Orangé.</i>
Vandyke Brown	...	...	...	...	...	<i>Ocre.</i>
German Brown	...	...	...	...	...	<i>Brun No. 4.</i>
Pearl Grey	...	...	...	...	...	<i>Gris Perle.</i>
Deep Black	...	...	...	...	...	<i>Noir Corbeau.</i>

Commence with the blue part of the sky, for which very pale Azure Blue and Roseleaf Green, with plenty of megilp, or oil, will be right. Wash it on, with the left hand side a little darker, and then dabble it. This will most probably rather obliterate the shape of your clouds; so put a soft rag round the tip of your finger, and with it remove any blue from the clouds, correcting the drawing of them as you do so. When you wish to represent very small clouds, take them out entirely in this way. For the grey in the sky use Pearl Grey. Strong Yellow, with more or less Azure Blue, as the occasion demands, will suffice for the distant landscape and the water, using some Roseleaf Green and German Brown for the shadow in the reeds and for the green reflection in the water. Azure Blue for the tail and flight feathers of the Kingfisher, and different shades of the same colour mixed with Roseleaf Green, for the other parts of the bird, with Vandyke Brown for the breast. For the brown tips to the leaves use German Brown.

PLATE VIII.

The same colours will be required as for the preceding plate, with the addition of a little Royal Purple (*Pourpre Riche*).

For the bright green shades, on the wings and back of the bird, use pure Roseleaf Green; and a little Royal Purple, mixed with Azure Blue, for the purplish tints. Shade the breast of the bird with German Brown. A little White Enamel (with respect to which, refer to general directions) will be an improvement to the flowers, and to the white part of the bird. Green and brown will be useful in finishing the water, leaves, and reeds, in proportion as they seem to be required.





PLATE IX.

FIRST WASHES OF PANSIES.

Sepia	<i>Brun No. 4.</i>	Roseleaf Green ...	<i>Vert Chrome Riche</i>
Dark Orange...	<i>Ocre.</i>	Azure Blue	<i>Bleu Riche.</i>
Strong Yellow ...	<i>Jaune Orangé.</i>	Royal Purple...	<i>Pourpre Riche.</i>
Persian Yellow ...	<i>Jaune à Mêler.</i>	Grey Black	<i>Noir Corbeau.</i>

When the sketch is quite complete, mix the colour for your background. Azure Blue and Strong Yellow, pale, with plenty of megilp, or oil, will serve for the tone behind the clematis. Use Sepia for the dark left hand corner. Do not forget that the pale part of the background must be dabbled first, and much time and trouble will be saved if, in painting the background, you produce the right tone for the first firing. For the clematis use a pale wash of Persian Yellow. For the yellow pansy, Strong Yellow will be best, painting it light and dark, so as to gain as much effect as possible at once. Dark Orange will be the colour to make use of for the amber touches in all the pansies. For the purple flowers, Royal Purple and Azure Blue will suffice, using more or less blue or purple as the case demands. In all velvety flowers, you will gain a much richer, softer effect, by drawing the different shades into one another whilst the colours are wet; but if great delicacy is required, let one colour dry before adding another. In using the oil colours, very little oil should be added to *Pourpre Riche*; its tendency is to become fat. For the greyish lights on the leaves, mix Azure Blue and Strong Yellow. For the warmer greens, Roseleaf Green and Strong Yellow, with Sepia and Dark Orange, when required.

PLATE X.

SECOND STAGE.

The same colours must be mixed as for the first painting, with the addition of White Enamel and Grey Black.

When the leaves are finished, shade the clematis with a greenish grey, composed of Azure Blue and Strong Yellow, and paint in the green and yellow centres. The yellow pansy may be shaded with Grey Black and Strong Yellow and darker touches of the latter. For the dark pansies use the same colours as before. When the shading on the clematis is dry, carefully scratch out all the prominent lights on the stamens, and all those on the petals, which have been necessarily covered in painting. Then, to four parts of Enamel, add one part of Persian Yellow, and paint the stamens with little sharp touches of relief. Do not use much megilp, water, oil, or turpentine, and never fill your brush with Enamel, but take a little touch, sufficient for each stroke, on the tip of it. If you think your background must be repainted for the second firing, do not use the Enamel until after it is fired, as it is most difficult to clean, if you get any paint on it.



PLATE XI.

AUTUMN-TINTED LEAVES.—FIRST STAGE.

German Brown	...	...	...	...	<i>Brun No. 4.</i>
Vandyke Brown	...	...	...	...	<i>Ocre.</i>
Brunswick Brown	...	...	...	...	<i>Rouge Chair.</i>
Deep Green	...	...	...	...	<i>Vert Noir.</i>
Roseleaf Green	...	...	...	...	<i>Vert Chrome Riche.</i>
Strong Yellow	...	...	...	...	<i>Jaune Orangé.</i>
Grey Black	...	...	...	...	{ <i>Noir Corbeau.</i> <i>Bleu Riche</i> (very small quantity).
Azure Blue	...	...	...	...	
Royal Purple	..	...	...	...	<i>Pourpre Riche.</i>

For the pale part of the background use pale German Brown. Shade this into the same colour, mixed with a little Deep Green, into a warm olive green.

For the leaves, put plenty of megilp with Vandyke Brown, used very thinly, and blend the Brunswick Brown into it whilst quite wet. For the orange-coloured leaves use rather darker Vandyke Brown, and for those of a dull green shade, Roseleaf Green, Strong Yellow, and German Brown.

For the dark parts of the bird, mix Grey Black, and a very little Royal Purple, but remember that the latter always shows much more after firing.

For the wild plum, you will require Azure Blue and Royal Purple, and try to get as much

effect as possible whilst it is quite wet. For this you must have one or two small dabbers in quills.

Put pure pale blue on the lights, purple and blue on the reflected lights, and purple alone for the shadows. Next, take your little dabber and blend the shades together, beginning with the blue.

Be very careful not to dabble the shadows all over the lights, and great care must be taken, in order to keep the tones soft, yet quite distinct. To assist in this, the tip of your finger used as a dabber will be found a very efficient instrument. As long as the colours keep moist, you may touch the berries again and again, redabbling after each time.

The student is advised first, to try a few experiments on a spare tile.





PLATE XII.

SECOND STAGE.

The same colours may be used as for the preceding plate, with the addition of Deep Black.

In shading the faded leaves, use first of all Brunswick Brown, thicker than in the first painting, and the darkest touches may be put on quite thickly. The dark portions of the bird's plumage may be shaded with Deep Black, and for the shading of the bird's breast, and the under side of its wing, make a grey with Azure Blue, Carmine, and Strong Yellow. The leaves painted with Vandyke Brown may be shaded with German Brown, and if there is any prospect of your plate requiring a second firing, do not touch the fruit in the second painting, as you will do it much more easily after it is fired. On the most prominent leaves, a little Strong Yellow, washed on to the Vandyke Brown, will help the effect, but do not let it touch the red.

PLATE XIII.

HEAD.

Vandyke Brown	...	...	...	...	...	<i>Evans' Brown.</i>
Sepia	...	...	...	...	...	<i>Brun No. 4.</i>
Brunswick Brown	...	...	...	...	...	<i>Rouge Chair.</i>
Grey Black	...	...	...	...	...	{ <i>Evans' Brown and Bleu Riche</i> (in this instance).
Deep Black	...	...	...	...	...	<i>Noir Corbeau.</i>
Strong Yellow	...	...	...	...	...	<i>Jaune Orangé.</i>
Deep Orange	...	...	...	...	...	<i>Ocre.</i>
Royal Purple	...	...	...	...	...	<i>Pourpre Riche.</i>
Azure Blue	...	...	...	...	...	<i>Bleu Riche.</i>
Roseleaf Green	...	...	...	...	...	<i>Vert Chrome Riche.</i>

The head shown in the following illustration is taken, on a very reduced scale, from a splendid specimen of Messrs. Minton & Co.'s painting on pottery. If the student wishes to attempt something in the same style, an entirely fresh branch of decoration is immediately opened to him, namely, that of gilding; but, as painting and gilding are generally considered quite distinct trades, the result will probably be much better, if you allow a gilder to lay your background, and also to burnish it after firing. This may be done by giving the order when the plate is sent for the first firing, as in any case, the whole subject should be painted, before the gold is touched. If, however, you are desirous of doing it yourself, the gold may be bought, either among the Worcester colours, or, if you are using Lacroix's colours, it may be



obtained ready ground on a little glass palette, of Messrs. Lechertier, Barbe & Co. Do not be tempted into buying the liquid gold in preference to this, as it presents, when fired, an extremely tinselly common appearance. Those who often use gold, reserve the same brush for the purpose, as it saves waste, there being then no necessity for rinsing it out. If it becomes hard, having been used with oil, dip the brush into turpentine and hold it before the fire before using it. The student who is unaccustomed to seeing gold before it is fired, will be surprised to find that it looks black, and after firing a dull yellow, which necessitates its being burnished in the following manner. This, however, should not be done until after the last firing. Mix some silver sand with water until it is of the consistency of paste, and rub it on to the gold with wool. Afterwards, polish it until it is dry, with a clean rag. If you wish to chase a pattern on the gold, you must use an agate burnisher, rubbing it always in the same direction and keeping your hand very steady, as any slip or mistake can only be rectified by having the plate refired, which will cause the gold to become dead again.

Lay the gold on thickly, and as evenly as possible, with a broad brush. It is most important to put it on well, as it cannot possibly be dabbled.

For the flesh tint put a pale wash of Vandyke Brown, with plenty of megilp in it, over the face and neck, and before dabbling it at all, put a little pale Brunswick Brown into each cheek. Then dabble the two colours together, being careful to finish the colour on the forehead, neck, chin, and nose, before touching the red with your dabber, otherwise you will have the red all over the face. Let the Brunswick Brown be well blended into the Vandyke Brown, and make it a shade darker than you wish it finally to appear, as it invariably becomes paler in the first firing. If you have had much practice in using your dabber, you may wash in the broad shadow on the face and neck whilst it is wet, and then blend the colours with your dabber. If you

feel uncertain as to the result of this, lay the flat wash first, and let them be thoroughly dry before they are retouched. When quite hard, mix some Vandyke Brown for the shadow, and the same colour mixed with a little Grey Black for the half-tones. Then dip your dabber straight into the colour, and put in the shadows without the use of any other brush. To do this successfully requires some little practice, as the effect is very bad if the shadows look spotty. After filling the dabber with colour, always try it on your palette, before touching the face with it. Students who are quite inexperienced, generally find it best to have the flat flesh tint fired, before shading it at all. Paint the lips with Brunswick Brown, and the same with a little Black in the darker parts. A good deal of stippling will be required before the second firing.

For the dress, mix Royal Purple, Deep Azure, and Deep Black, and if this colour appears too violent after it is fired, a wash of Vandyke Brown will improve it.

For the ribbon and jewels, mix Azure Blue and Roseleaf Green. The gold may be painted with pale Strong Yellow, shaded with Deep Orange, and a little Vandyke Brown in the darkest parts.

The hair may be painted with Vandyke Brown, and shaded with Sepia, and be careful to treat it very broadly. The original of this illustration is painted entirely in underglaze, and presents a richness of colour which cannot be completely achieved in overglaze painting.

PLATE XIV.

FIGURE.

Brunswick Brown	...	...	...	...	{ <i>Rouge Chair</i> (for flesh tint).
					{ <i>Brun Rouge Riche</i> (for dress).
Vandyke Brown	...	...	...	...	<i>Evans' Brown.</i>
German Brown	{	...	...	...	<i>Brun No. 4.</i>
Sepia					
Roseleaf Green	...	...	...	...	<i>Vert Chrome Riche.</i>
Strong Yellow	...	...	...	...	<i>Jaune Orangé.</i>
Grey Black	...	...	...	...	{ <i>Noir Corbeau</i> , and a very little
					{ <i>Bleu Riche.</i>
Deep Black	...	...	...	...	<i>Noir Corbeau.</i>

Plate XIV. is copied from a piece of painting, from the studio of Messrs. Doulton & Co., from a design by Mrs. Sparkes. If the student wishes to do something in a similar style, the colours above mentioned will be the colours to use.

For the first wash on the background, mix Roseleaf Green and German Brown. In the darkest parts, shade a little extra brown into this. Do not attempt to put in the leaves whilst the ground is wet, but let it have time to thoroughly dry. Then with some Sepia indicate the shapes of the leaves, not too darkly, and when that stage is also dry, wash in the shadows very flatly, with a warm green, being most careful not to disturb the under-coating. For the oranges, use Strong Yellow and Deep Orange, and shade them with Vandyke Brown and a little German Brown in the darkest parts. For

the stonework put a pale wash of Strong Yellow mixed with a great deal of megilp, and while it is quite wet, put in the lighter shades with Grey Black, and dabble them together. The broad dark shadow behind the man may be put in with brown and green, the former predominating.

For the man's clothing use Brunswick Brown, and when quite dry, it may be shaded with the same, mixed with a little black.

The head may be treated in the same way as the head in the preceding plate.

For the hair mix a little Grey Black. Brunswick Brown and Deep Black, used quite thickly, will make a good outline for the whole figure.





PLATE XV.

CONVENTIONAL BORDERS.

Deep Black	...	...	...	...	...	<i>Noir Corbeau.</i>
Dark Orange	...	...	...	...	...	<i>Ocre.</i>
Strong Yellow	...	...	...	...	...	<i>Jaune Orangé.</i>
Brunswick Brown	...	...	...	...	...	<i>Brun Rouge Riche.</i>
Roseleaf Green	...	...	...	...	...	<i>Vert Chrome Riche.</i>
Azure Blue	...	...	...	...	...	<i>Bleu Riche.</i>
Brunswick Brown	{	...	...	...	...	<i>Violet de Fer.</i>
Deep Black						

The greens may all be mixed with Deep Black and Strong Yellow. For the pieces of deep orange use Dark Orange. For the different shades of yellow, Strong Yellow, lighter or darker, as you may require it. For the red background, Brunswick Brown. The same, mixed with Black for the bands of colour, and the same or Deep Black for outlining. Roseleaf Green and Deep Azure, for the brighter shades of peacock. For the dark shade, Roseleaf Green, Deep Azure, and Deep Green.

The Italian border may be drawn with a pen and Vitriifiable Ink, and the colours washed on afterwards, but this is not a necessity.* Remember always to paint in the dark parts first. In using these borders, do not copy the colouring indiscriminately, as the borders must be made to harmonise with the more prominent parts of the work in hand.

* See General Introduction.

FRONTISPIECE.

Deep Green	...	...	...	...	...	<i>Vert Noir.</i>
Azure Blue	...	...	...	...	...	<i>Bleu Riche.</i>
Roseleaf Green	...	...	...	...	...	<i>Vert Chrome Riche.</i>
Brunswick Brown	...	...	...	...	...	<i>Brun Rouge Riche.</i>
Royal Purple	...	...	...	...	...	<i>Pourpre Riche.</i>
Dark Orange	...	...	...	...	...	<i>Ocre.</i>
German Brown	...	...	...	...	...	<i>Brun No. 4.</i>

Although the specimens of pottery represented in the frontispiece are not really over-glaze painting, being pieces of Lambeth Faïence, there is no reason why they should not be adapted to over-glaze, with a very good effect.

The plate should be done on cream-coloured ware, and a mixture of Deep Green, Azure Blue, and Roseleaf Green will match the peacock colour. As the pattern will be elaborate, and the ground dark, it will take a long time to scratch out, therefore this will present a good opportunity for trying the mixture of castor oil and spike oil (see General Directions). When the design is quite clean, wash a little Vandyke Brown over the greater part of it. Lastly, on the clean parts put a few touches of enamel, mixed with Deep Orange.

For the background of the large vase use Dark Orange, rather pale, and German Brown. For the dark brown on the pilgrim bottle, either Brunswick Brown, or Vandyke Brown and Royal Purple, will look well, but in either case the colour must be used very thickly. The other tints are so obvious that they need no description; but in working out any design which is on so small a scale, by all means supplement the materials you have before you by sketches from nature.

BOOKS ON PAINTING IN OILS AND WATER COLOURS

Published by Cassell & Company, Limited.

Landscape Painting in Oils, A Course of Lessons in. By A. F. GRACE. With Eight Reproductions in Colour after Turner, Constable, De Wint, Müller, F. Walker, Mason, A. F. Grace, &c., and numerous examples engraved on Wood from well-known Pictures. Price £2 2s.

Figure Painting in Water Colours. With Sixteen Coloured Plates from Designs by BLANCHE MACARTHUR (Medallist, Royal Academy, 1877), and JENNIE MOORE (Medallist for a Drawing from the Antique). With Full Instructions by the Painters. Crown 4to, cloth gilt, price 7s. 6d.

China Painting. By MISS FLORENCE LEWIS. Illustrated with Sixteen Original Coloured Plates, and Wood Engravings. Extra fcap. 4to, cloth, price 5s.

Trees, How to Paint in Water Colours. By W. H. J. BOOT. With Eighteen Coloured Plates. Crown 4to, cloth, price 5s.

Flower Painting in Water Colours. *First and Second Series*, each containing Twenty Coloured Plates by F. E. HULME, F.L.S., F.S.A., and Instructions by the Artist. Interleaved with Drawing Paper. Crown 4to, cloth, price 5s. each.

A Course of Water Colour Painting. *New and Revised Edition.* With 24 Coloured Plates from Designs by R. P. LEITCH. The Letterpress to each Plate contains Full Instructions to the Learner, and the Plates show the progress of the work through its different stages. Price 5s.

A Course of Sepia Painting. With 24 Plates from Designs by R. P. LEITCH. The Letterpress to each Plate contains Full Instructions to the Learner, and the Plates show the progress of the work through its different stages. Oblong 4to, cloth, price 5s.

A Course of Painting in Neutral Tint. With 24 Plates from Designs by R. P. LEITCH. The Letterpress to each Plate contains Full Instructions to the Learner, and the Plates show the progress of the work through its different stages. Oblong 4to, cloth, price 5s.

Sketching from Nature in Water Colours. By AARON PENLEY. With Illustrations in Chromo-Lithography after Original Water-Colour Drawings. Price 15s.

CASSELL & COMPANY, LIMITED : LUDGATE HILL, LONDON ; PARIS, & NEW YORK.

NEW TECHNICAL AND SCIENTIFIC VOLUMES.

- Practical Mechanics.** By JOHN PERRY, M.E., Professor of Mechanical Engineering, City and Guilds of London Technical College, Finsbury. With numerous Illustrations. Extra fcap. 8vo, cloth, 3s. 6d.
- Cutting Tools worked by Hand and Machine.** By ROBERT H. SMITH, M.I.M.E.; Assoc. M.I.C.E.; Professor of Engineering in the Mason Science College, Birmingham. With numerous Practical Drawings. Extra fcap. 8vo, cloth, 3s. 6d.
- Design in Textile Fabrics.** By T. R. ASHENHURST, of the Technical School, Bradford. With Coloured Designs. 4s. 6d.
- Handrailing and Staircasing.** A complete Set of Lines for Handrails by "Square-cut System," and full Practical Instructions for making and fixing Geometrical Staircases. By FRANK O. CRESWELL, of the Liverpool School of Science; Medallist for Geometry. With upwards of One Hundred Working Drawings. Fcap. 8vo, 3s. 6d.
- Intermediate Text-Book of Physical Science.** By F. H. BOWMAN, D.Sc., F.R.A.S., F.L.S.; Fellow of the Geological, Chemical, and Royal Microscopical Societies; Straton Prizeman and Gold Medallist in Technology, University of Edinburgh. Illustrated. Cloth, 3s. 6d.

DRAWING BOOKS FOR YOUNG ARTISTS.

- How to Draw Elementary Forms, Models, &c.** 120 Studies in Freehand. By CHARLES RYAN. Price 6d.
- How to Draw Floral and Ornamental Forms.** 80 Studies in Freehand. By CHARLES RYAN. Price 6d.
- How to Draw Landscapes, Trees, Ships, &c.** 60 Studies in Freehand. By R. P. LEITCH. Price 6d.
- N.B.—The above Books contain Blank Paper for copying each example.*

SUPERIOR DRAWING BOOKS,

Printed in Fac-simile by Lithography, are also published, bound in cloth, gilt lettered, price 5s. each.

- How to Draw Figures.** 96 Graduated Studies from Life.
- How to Draw in Freehand.** 96 Graduated Studies of Models.
- How to Draw Floral and Vegetable Forms.** 96 Studies from Nature.
- How to Draw Animals.** 96 Studies from Nature.

 CASSELL & COMPANY'S EDUCATIONAL CATALOGUE, containing Descriptions of their New and Standard Educational Works, including French, German, and Latin Books, Scientific and Technical Works, Arithmetics, Readers, Copy-Books, Dictionaries, Drawing Copies, Students' Manuals, Elementary School Books, &c., post free on application.

SELECTIONS FROM

CASSELL'S TECHNICAL MANUALS.

- Linear Drawing and Practical Geometry.** By E. A. DAVIDSON. Showing the application of the Geometrical Constructions to Trade, Manufactures, Engineering, Architecture, and Design. With about 150 Illustrations. Cloth, 2s.
- Orthographic and Isometrical Projection.** By E. A. DAVIDSON. Enlarged, with Chapters on Traces, Normals, and Tangent Planes. With 100 Questions for Examination, and containing 46 whole-page Drawings. Cloth, 2s.
- Systematic Drawing and Shading.** By CHARLES RYAN. Giving Practical Lessons on Outline Drawing, Shading, Geometric Model Drawing, Complex Models and Objects, Landscape Drawing, Figure Drawing, &c. With an Appendix on the formation of Schools of Art, and the method of conducting Drawing Classes. Cloth, 2s.
- Practical Perspective.** By E. A. DAVIDSON. Containing Perspective Projection of Simple Points, Lines, Planes, and Rectangular Solids; Polygons, Prisms, Pyramids, Circles, Cylinders, Arches, &c. With 36 double-page Illustrations drawn on Wood by the Author. Cloth, 3s.
- Linear Drawing and Projection.** The Two Volumes in One. Cloth, lettered, 3s. 6d.
- Model Drawing.** By E. A. DAVIDSON. Containing the Elementary Principles of Drawing from Solid Forms, the Method of Shading, and Patterns for making Drawing Objects in Cardboard. With Twenty single and Six double-page Plates. Cloth, 3s.
- Cassell's Course of Practical Geometry.** By ELLIS A. DAVIDSON. Consisting of 64 Cards, including Geometrical Design for Practice in Geometrical Drawing, and a course of Elementary Lessons in Solid Geometry and Projection. Size, $7\frac{1}{2} \times 6$ inches. Price 5s.
- Cassell's "School Board" Drawing Copies.**
FIRST GRADE—FREEHAND. 64 Freehand Drawing Copies, with Instructions on each. On strong cards. Price 5s.
SECOND GRADE—FREEHAND. A Series of carefully graduated Copies. On stout cardboard. Price 5s.

CASSELL & COMPANY, LIMITED; LUDGATE HILL, LONDON; PARIS, & NEW YORK.

ILLUSTRATED AND FINE ART WORKS.

Some Modern Artists. With highly-finished Engravings of their most popular Masterpieces, and Portraits from recent Photographs and Authentic Paintings. 12s. 6d.

Choice Poems by H. W. Longfellow. Illustrated from Paintings by his Son, ERNEST W. LONGFELLOW. Small 4to, cloth, 6s.

The Forging of the Anchor. A Poem, By Sir SAMUEL FERGUSON, LL.D. With 20 Original Illustrations specially executed for the Work by A. BARRAUD, H. G. GLINDONI, G. W. HARVEY, W. HATHERELL, SEYMOUR LUCAS, HAL LUDLOW, J. NASH, W. H. OVEREND, C. J. STANILAND, and W. H. WYLLIE. Small 4to, cloth, gilt edges, 5s.

Sunlight and Shade. Original and Selected Poems. With Exquisite Engravings by the best Artists of the day. 7s. 6d.

Picturesque Europe. POPULAR EDITION. Vols. I. and II. Each containing 13 Exquisite Steel Plates, and about 200 Original Engravings by the best Artists. Cloth gilt, 18s. each. N.B.—The *Original Edition*, in Five magnificent Volumes, royal 4to size, can still be obtained, price £2 2s. each.

Vols. I. and II. of PICTURESQUE EUROPE contain GREAT BRITAIN AND IRELAND complete; Vols. III., IV., and V. describe the Continent.

Picturesque America. Vols. I. and II., with 12 Exquisite Steel Plates, and about 200 Original Wood Engravings in each. Royal 4to, handsomely bound in cloth gilt, gilt edges, £2 2s. each.

The Magazine of Art. Yearly Volume. With about 400 Illustrations by the first Artists of the Day, and Etching for Frontispiece. Handsomely bound in cloth gilt, gilt edges, 16s. The price of Vols. II., III., and IV. has been increased, viz.:—Vols. II. and III. to 15s. each, and Vol. IV. to 21s.

Egypt, Descriptive, Historical, and Picturesque. By Prof. G. EBERS. Translated by CLARA BELL, with Notes by SAMUEL BIRCH, LL.D., F.S.A. With Original magnificent Engravings. Vol. I., 45s.; Vol. II., £2 12s. 6d.; or in box, £4 17s. 6d. the set.

Morocco: its People and its Places. By EDMONDO DE AMICIS, translated by C. ROLLIN TILTON. Cloth gilt, 7s. 6d.

European Ferns. Their Form, Habit, and Culture. By JAMES BRITTON, F.L.S. With 30 Fac-simile Coloured Plates painted from Nature by D. BLAIR, F.L.S. Demy 4to, cloth gilt, gilt edges, 21s.

The Great Painters of Christendom, from Cimabue to Wilkie. By JOHN FORBES-ROBERTSON. Illustrated throughout. Royal 4to, cloth gilt, £1 1s.

Familiar Wild Flowers. FIRST, SECOND, THIRD, AND FOURTH SERIES. By F. E. HULME, F.L.S., F.S.A. Each containing Forty Full-page Coloured Plates in each, and Descriptive Text. Cloth gilt, 12s. 6d. each.

Familiar Garden Flowers. FIRST, SECOND, AND THIRD SERIES. By SHIRLEY HIBBERD. Each containing Forty Full-page Coloured Plates by F. E. HULME, F.L.S., F.S.A. Cloth gilt, 12s. 6d. each.

The Holy Land. From the Original Drawings by DAVID ROBERTS, R.A. Divisions I. and II., with 42 Plates in each, 18s. each.

Evangeline. *Édition de Luxe.* With 29 magnificent Original Illustrations by FRANK DICKSEE, A.R.A., beautifully reproduced in Photogravure. The Work is printed on Whatman's hand-made paper, size 10½ in. by 12½ in., the Wood Engravings being on real China paper, and is elegantly bound in cloth gilt. *Further particulars, with price, &c., may be obtained of any Bookseller.*

Our Own Country. An Illustrated Geographical and Historical Description of the Chief Places of Interest in Great Britain. Complete in Six Vols., with upwards of 200 Original Illustrations in each. Extra crown 4to, cloth, 7s. 6d. each; in library binding, Three Vols., £1 17s. 6d.

The Royal Shakspeare. A Handsome Fine-Art Edition of the Poet's Works. Vols. I. and II., with Exquisite Steel Plates, and numerous Wood Engravings, by FRANK DICKSEE, A.R.A., J. D. WATSON, VAL BROMLEY, C. GREEN, J. McL. RALSTON, and other Artists. The Text is that of Prof. DELIUS, and Vol. I. contains Mr. FURNIVALL'S Life of Shakspeare. Price 15s. each.

The Leopold Shakspeare. From the Text of Professor DELIUS, with "Edward III." and "The Two Noble Kinsmen," and an Introduction by F. J. FURNIVALL, Director of the New Shakspeare Society. With about 400 Illustrations. Cloth, 6s., cloth gilt, 7s. 6d. *Dedicated by permission to H.R.H. PRINCE LEOPOLD.*

CASSELL & COMPANY, LIMITED: LUDGATE HILL, LONDON; PARIS, & NEW YORK.

BIOGRAPHY, TRAVELS, HISTORY, LITERATURE, &c.

India: The Land and the People. By Sir JAMES CAIRD, K.C.B. With numerous Full-page Illustrations. Demy 8vo, cloth gilt, price 7s. 6d.

English Poetesses. By ERIC S. ROBERTSON, M.A. Crown 8vo, cloth, 5s.

Life of the Rt. Hon. John Bright. By W. ROBERTSON. With Steel Portrait. 7s. 6d.

Oliver Cromwell: the Man and his Mission. By J. ALLANSON PICTON. With Steel Portrait. Demy 8vo, cloth, 7s. 6d.

Constitutional History and Political Development of the United States. By SIMON STERNÉ, of the New York Bar. 5s.

Wealth Creation. By AUGUSTUS MONGREDIEN, Author of "Free Trade and English Commerce." Crown 8vo, cloth, price 5s.

Modern Europe, A History of. By C. A. FYFFE, M.A., Fellow of University College, Oxford. Vols. I. and II., 12s. each.

Wood Magic. By RICHARD JEFFERIES, Author of "The Gamekeeper at Home." Cloth, 6s.

The Life of the Rt. Hon. W. E. Gladstone. By GEORGE BARNETT SMITH. Extra crown 8vo, cloth, with Portrait, 3s. 6d.; *Jubilee Edition*, with Portrait, 1s.

England: Its People, Polity, and Pursuits. By T. H. S. ESCOTT. *Cheap Edition*. One Vol., 7s. 6d.

Burnaby's Ride to Khiva. *Cheap Edition*. Extra crown 8vo, with Three Maps, cloth, 3s. 6d. *People's Edition*. 6d.

Russia. By D. MACKENZIE WALLACE, M.A. *Cheap Edition*, in One Vol., 10s. 6d.

Science for All. Edited by Dr. ROBERT BROWN, F.R.G.S., &c. Complete in Five Vols., each containing about 350 Illustrations and Diagrams. 4to, cloth, 9s. each.

Cassell's History of India. By JAMES GRANT, Author of "British Battles on Land and Sea," &c. With about 400 Plans, Illustrations, and Maps. Complete in Two Vols. Extra crown 4to, 1, 150 pp., cloth, 9s. each; Library Edition, imitation Roxburgh, 4s.

England, Illustrated History of, from the Earliest Period to the Present Time. With upwards of 2,000 Illustrations. NEW TONED PAPER EDITION, complete in Nine Vols., post 4to, 5,500 pages, cloth gilt, 9s. each. LIBRARY EDITION, Nine Vols., brown cloth, gilt tops, 4s. 10s.

Old and New London. A Narrative of its History, its People, and its Places. *Complete in Six Volumes*, each containing about 200 Illustrations and Maps. Cloth, 9s. each. Library Edition, imitation Roxburgh, 4s. Six Vols., half-morocco, 4s. 15s. the set. Vols. I. and II. are by WALTER THORNBURY, Vols. III., IV., V., and VI. are by EDWARD WALFORD.

Old and New Edinburgh, Cassell's. Complete in Three Vols., with nearly 600 Original Illustrations. Extra crown 4to, cloth, 9s. each.

Cassell's Concise Cyclopædia. A Cyclopædia in One Volume, containing Comprehensive and Accurate Information, brought down to the latest date. Cloth gilt, 15s.

The Encyclopædic Dictionary. A New and Original Work of Reference to all the Words in the English Language, with a full Account of their Origin, Meaning, Pronunciation, and Use. Five Divisional Vols., now ready, extra crown 4to, cloth, price 10s. 6d. each; or the first Four Vols. bound in two, in half-morocco, 21s. each. Vol. I. contains A—BAR; Vol. II. contains B—CAB; Vol. III. contains CAB—CONA; Vol. IV. contains CONC—DES; Vol. V. contains DEST—EXTRA.

Library of English Literature. Selected, Edited, and Arranged by Prof. HENRY MORLEY. With Illustrations taken from Original MSS., &c. Each Vol. complete in itself.

VOL. I. SHORTER ENGLISH POEMS. 12s. 6d.

VOL. II. ILLUSTRATIONS OF ENGLISH RELIGION. 11s. 6d.

VOL. III. ENGLISH PLAYS. 11s. 6d.

VOL. IV. SHORTER WORKS IN ENGLISH PROSE. 11s. 6d.

VOL. V. LONGER WORKS IN VERSE AND PROSE. 11s. 6d.

The five Volumes handsomely bound in half-morocco, 45 5s.

English Literature, Dictionary of. Being a Comprehensive Guide to English Authors and their Works. By W. DAVENPORT ADAMS. 720 pages, extra fcap. 4to, cloth, 10s. 6d.

A First Sketch of English Literature, from the Earliest Period to the Present Time. By Professor HENRY MORLEY. Crown 8vo, 912 pp. Cloth, 7s. 6d.

Dictionary of Phrase and Fable; giving the Derivation, Source, or Origin of Common Phrases, Allusions, and Words that have a Tale to Tell. By the Rev. Dr. BREWER. 3s. 6d.; or with leather back, 4s. 6d.

The Practical Dictionary of Mechanics. Containing 15,000 Drawings of Machinery, Instruments, and Tools, with Comprehensive and TECHNICAL DESCRIPTION of every subject. Three Vols., super-royal 8vo, cloth, 4s. 3s.; half-morocco, 4s. 15s.

CASSELL & COMPANY'S COMPLETE CATALOGUE, containing a List of *Several Hundred Volumes*, including Bibles and Religious Works, Fine-Art Volumes, *Children's Books*, *Dictionaries*, *Educational Works*, *History*, *Natural History*, *Household and Domestic Treatises*, *Handbooks and Guides*, *Science*, *Travels*, &c. &c., together with a Synopsis of their numerous Illustrated Serial Publications, sent post free on application.

CASSELL & COMPANY, LIMITED: LUDGATE HILL, LONDON; PARIS, & NEW YORK.

GETTY CENTER LIBRARY



3 3125 00759 5289

